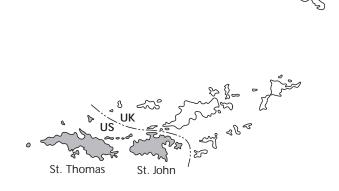
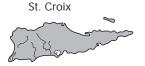
Virgin Islands





 Basin Boundaries (USGS 6-Digit Hydrologic Unit)

For information about water quality in the Virgin Islands, contact:

U.S. Virgin Islands Department of Planning and Natural Resources Division of Environmental Protection Water Gut Homes 1118 Christiansted, St. Croix, VI 00820-5065 (809) 773-0565

Surface Water Quality

The U.S. Virgin Islands consist of three main islands (St. Croix, St. Thomas, and St. John) and over 50 smaller islands and cays located in the Caribbean Sea. The islands lack perennial streams or large freshwater lakes or ponds. Water quality in the U.S. Virgin Islands is generally good but declining due to an increase in point source discharges and nonpoint source pollution entering the marine environment.

The Virgin Islands municipal sewage treatment plants, operated by the Virgin Islands Department of Public Works, are the major source of water quality violations in the Territory. Neglect, combined with a lack of qualified operators and maintenance staff, results in frequent breakdowns of lift stations, pump stations, and pipelines. Clogged and collapsed lines frequently cause discharges into surface waters. Stormwater also overwhelms sewage treatment facilities and results in bypasses of raw or undertreated sewage into bays and lagoons.

Other water quality problems result from unpermitted discharges, permit violations by private industrial dischargers, oil spills, and unpermitted filling activities in mangrove swamps. Nonpoint sources of concern include failing septic systems, erosion from development, urban runoff, waste disposal from vessels, and spills.

Ground Water Quality

The Virgin Islands' ground water is contaminated with bacteria, saltwater, and volatile organic compounds. Septic tanks, leaking municipal sewer lines, and sewage bypasses contaminate ground water with bacteria. Overpumping of aquifers causes saltwater intrusion. VOC contamination is due to underground storage tanks and indiscriminate discharges of waste oil.

Programs to Restore Water Quality

The Territorial Pollution Discharge Elimination System (TPDES) requires permits for all point source discharges, but not all permitted facilities are in compliance with their permit requirements. During the 1992-1993 reporting period, the Division of Environmental Protection brought four major violators into compliance. The Virgin Islands is also developing new regulations for citing and constructing onsite sewage disposal systems and advocating best management practices in the Revised Handbook for Homebuilders and Developers.

Programs to Assess Water Quality

The Ambient Monitoring Program performs quarterly sampling at 64 fixed stations around St. Croix, 57 stations around St. Thomas, and 19 stations around St. John. Samples are analyzed for fecal coliforms, turbidity, dissolved oxygen, and temperature. Twenty stations on St. Croix were also sampled for phosphorus, nitrogen, and suspended solids. Intensive studies, which include biological sampling, are conducted at selected sites that may be affected by coastal development. The Virgin Islands does not monitor bacteria in shellfish waters or toxics in fish, water, or sediment.